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(74) Agent: BUCHANAN, Elspeth, Victoria; P.L. Berry & Associates, P.O. Box 1250, Christchurch (NZ).

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(71) Applicant (for all designated States except US):
HOLMES SOLUTIONS LIMITED [NZ/NZ]; 61
Cambridge Terrace, Christchurch (NZ).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BULL, Desmond, Kenneth [NZ/NZ]; 19, Thornwood Place, Redwood, Christchurch (NZ). ALLINGTON, Christopher, James [NZ/NZ]; 118 Roker Street, Somerfield, Christchurch (NZ). NEWTON, Richard, John [GB/NZ]; 3, Davie Street, Kaiapoi (NZ). (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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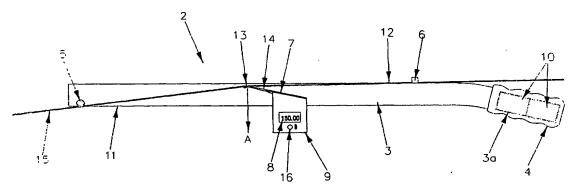
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG).

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS FOR TESTING TENSION OF ELONGATED FLEXIBLE MEMBER



(57) Abstract: A handheld apparatus (2) for checking the tension of the wire (15) includes a support (3) with two spaced pegs (5,6) mounted on it. A spring (7) mounted on the support (3) between the two pegs. A strain gauge (14) is mounted on the spring and measures the displacement of the spring (7). A fully portable power supply is connected to a computer (9) with a readout (8). In use, the wire (15) is arranged in a predetermined path over and/or under the pegs (5,6) so that it presses against the spring (7). The amount the spring (7) is displaced, which is related to the tension, is measured by the signal from the strain gauge. The signal is passed to the computer (9), which calculates the tension from this measurement and displays the result on the readout (8).

INTERNATIONAL SEARCH REPORT

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А.	CLASSIFICATION OF SUBJECT MATTE	3						
Int. Cl. 7:	G01L 5/10							
According to	International Patent Classification (IPC) or to be	th national classification and IPC						
В.	FIELDS SEARCHED							
Minimum docu	mentation searched (classification system followed b	v classification symbols)						
Documentation	searched other than minimum documentation to the	extent that such documents are included in the fields searched						
		of data base and, where practicable, search terms used) measure, test, portable, spring and similar terms						
C.	DOCUMENTS CONSIDERED TO BE RELEVA	NT						
Category*	Citation of document, with indication, where	ppropriate, of the relevant passages Relevant to claim No.						
A	JP 9-005181 A (SHIMPO IND CO LTD) Figures	10 January 1997						
A	SU 1763913 A (KH AVIATSIONNYJ INSTITUT) 23 September 1992 Figure 1							
Α	DE 19605036 A (HEICKS INDUSTRIE) Columns 2, 3, figures	ELEKTRONIK GMBH) 14 August 1997						
XF	rurther documents are listed in the continua	ion of Box C X See patent family annex						
"A" docume which i relevan		later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention						
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claim(s publica	ent which may throw doubts on priority "Y" i) or which is cited to establish the tion date of another citation or other special (as specified)	hen the document is taken alone occument of particular relevance; the claimed invention cannot be onsidered to involve an inventive step when the document is combined ith one or more other such documents, such combination being obvious to person skilled in the art						
exhibit	ent referring to an oral disclosure, use, "&" ion or other means ent published prior to the international filing at later than the priority date claimed	document member of the same patent family						
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28 October		0 3. 11. 03						
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PO BOX 200, E-mail address	N PATENT OFFICE WODEN ACT 2606, AUSTRALIA :: pc(@ipaustralia.gov.au	GREG POWELL						
racsimile No.	(02) 6285 3929	Telephone No: (02) 6283 2308						

INTERNATIONAL SEARCH REPORT

International application No. PCT/NZ03/00191

Category*	Citation of document, with indication, where appropriate, of the relevant passages					
	NO ODES AS A CALIFORMOTIVE SYSTEMS LADOR ATORY INC)	claim No.				
	WO 98/51545 A (AUTOMOTIVE SYSTEMS LABORATORY INC) 19 November 1998	l l				
A	Abstract, page 7 line 18-page 9 line 6, figures 1, 2					
	US 4759226 A (LEURER) 26 July 1988					
Α	Column 1 lines 6-14, 58-68, column 2 lines 30-40, figures					
	US 2285471 A (STURGESS) 9 June 1942					
A	Figures					
	·					



International application No.

Information on patent family members

PCT/NZ03/00191

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member							
JР	9-005181	NONE							
SU	1763913	NONE							
DE	19605036	NONE							
wo	98/51545	CA	2259291	EP	0910523	KR	2000023738		
	·	US	5965827						
US	4759226	CH	669778	DE	3506698	FR	2578050		
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